

# ABOUT PROPERTY ASSESSED CLEAN ENERGY FINANCING

Prepared by Ryan O'Connor (AMC)

Presented by Janet Streff (OES)

July 26, 2010



**The following information was excerpted  
from three presentations to the  
Metropolitan Energy Policy Coalition on  
June 3, 2010**

**The presenters to the MEPC were:**

- State Senator John Doll (PACE bill author)**
- Mark Zimring (U.S. Dept. of Energy Lawrence Berkley Labs)**
- Stefanie Galey (MN Institute of Public Finance)**

# **BACKGROUND ABOUT MINNESOTA'S NEW PACE LAW**

**Presented by Sen. John Doll**

**6/3/2010**



**35% OF U.S. ENERGY USE**  
and carbon emissions comes from our buildings

*Doll 6/3/10 Presentation*

**22%** Unemployment

*U.S. construction industry, 04/2010*



*Doll 6/3/10 Presentation*

# THE BARRIER: UPFRONT COSTS



**How do we get to the on-going monthly operational energy savings when the upfront costs are in the thousands and credit is ultra-tight?**

*Doll 6/3/10 Presentation*

# GENERAL COMPONENTS OF A PACE PROGRAM

- Allow property owners to install RE and EE paying for the cost over functional it's life through a Property Tax assessment
- No up-front cost to property owner, funding provided through municipal revenue bond issuance
- Participants pay only for cost of project and nominal fees to administer program
- Debt obligation is attached to property allowing for transferability upon change in property ownership
- 100% Voluntary
- It PAYS! – Pay As You Save!



# HOW PACE WORKS

**City or county  
creates a  
property-  
secured  
financing  
district or  
similar legal  
mechanism**

**Property  
owners  
voluntarily  
apply to  
qualify for  
financing and  
secure energy  
audit**

**Qualifying  
projects include  
solar PV and  
Thermal, Geo-  
thermal, EV  
upgrades,  
energy  
conservation  
improvements**

**Owner must  
demonstrate  
ability to  
repay, be  
current on  
mortgage and  
PT.**



# HOW PACE WORKS

Principal  
amount not  
to exceed 10%  
of assessed  
value of  
property

Licensed  
contractor  
performs  
installation,  
city inspects

Proceeds  
from revenue  
bond  
provided to  
property  
owner to pay  
for project

Property  
owner  
repays bond  
through  
property  
tax bill  
(up to 20  
years)

# KEY BENEFITS TO COUNTIES & CITIES

**Helps meet  
energy  
efficiency goals**

**Improves  
property  
values**

**Promotes  
local jobs**

# KEY BENEFITS TO PROPERTY OWNERS

**Saves money  
on utility bills**

**Does not draw  
down owners  
available  
credit**

**Repayment  
obligation can  
be transferred  
to new owner**

# KEY COMPONENTS OF MN LEGISLATION

## Legal Authority/ Structure

- Permits cities, counties, towns to est. program
- Revenue bond authority, secured by senior lien
- Qualifying projects can EE, RE, HV elec. Upgrades

## Program Requirements

- Energy Audits and/or RE feasibility study
- Qualified contractors perform work, 100% inspected, 10% performance verification
- Max. 10% loan to assessed value of property, Max. 20 yr term
- Owners must be current on mortgage and taxes, demonstrate ability to pay assessment

## Financing

- On-demand bond financing for small projects
- Pooled or interim financing structures

# **PACE AND ENERGY EFFICIENCY PROGRAMS THROUGHOUT THE U.S.**

**Presented by Mark Zimring**

**6/3/2010**

# 150+ Residential Energy Efficiency Financing Programs in the US...



**Success!!  
Our work is  
already done.**

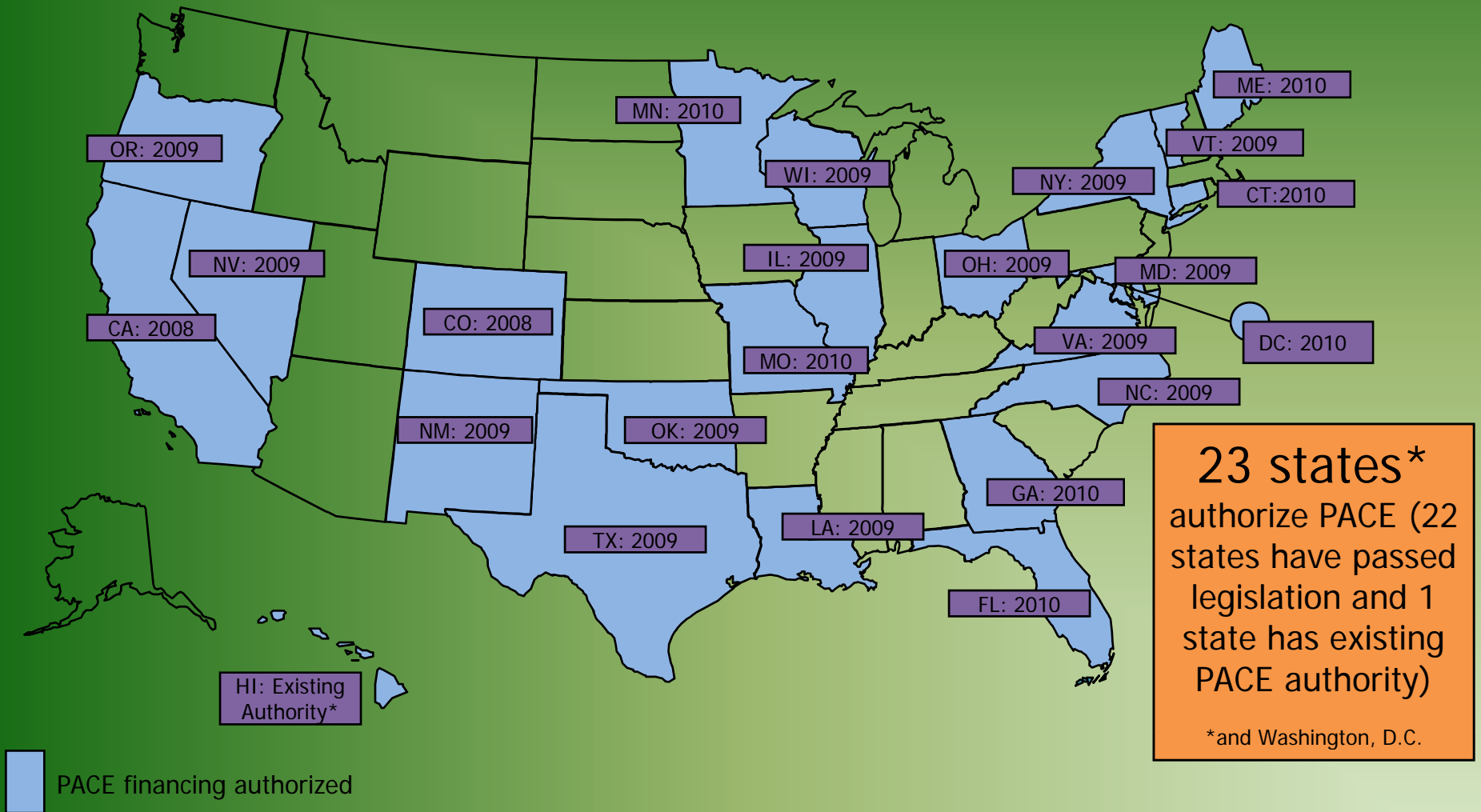
# ISSUES WITH EXISTING FINANCING OPTIONS

- Low Participation Rates
- Limited Applicability to Households Most in Need
- Limited Support for Comprehensive Retrofits
- Inability of Programs to Recoup Their Costs

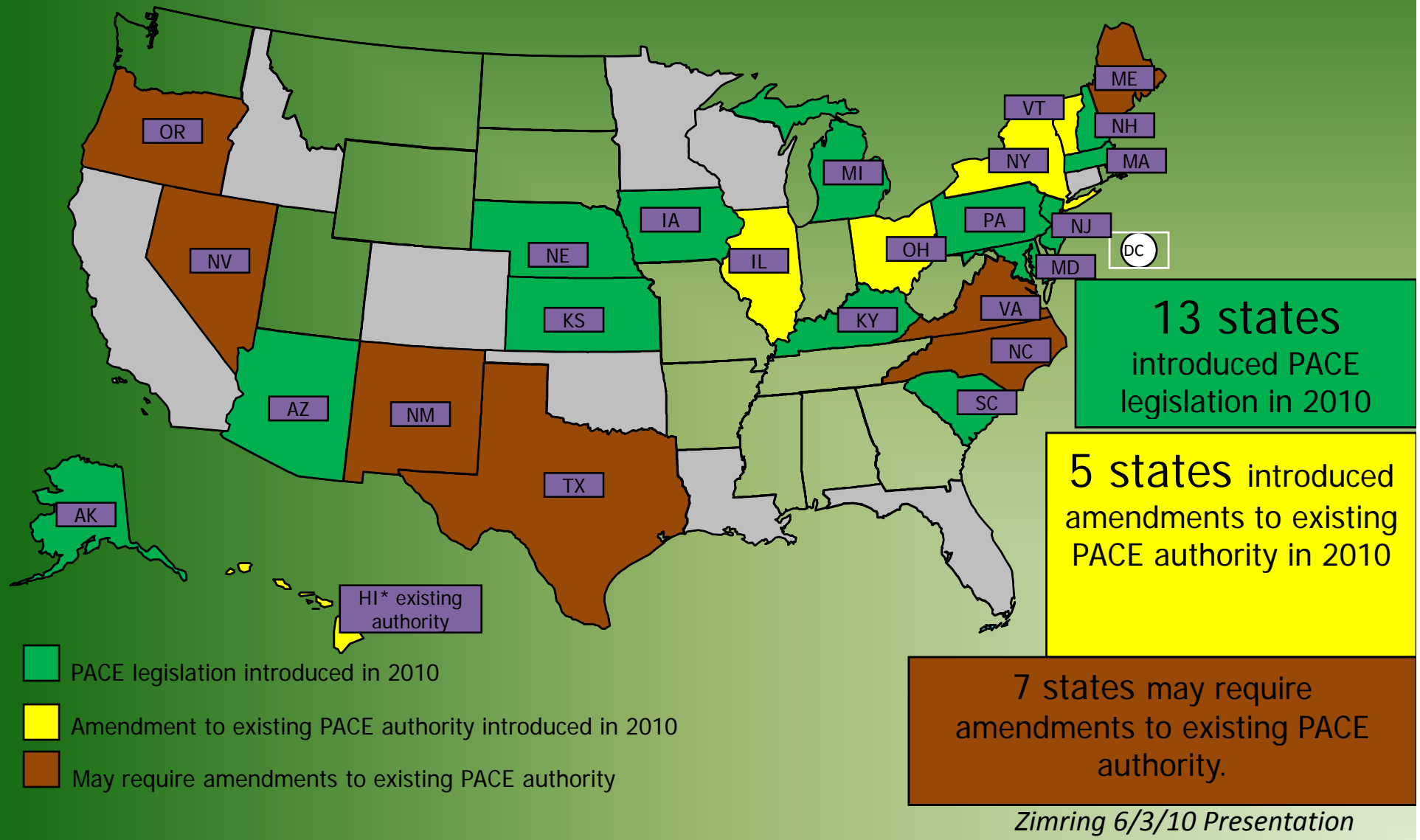




# STATES THAT HAVE AUTHORIZED PACE



# ONGOING PACE LEGISLATIVE ACTIVITY



# EXAMPLES: EXISTING PACE PROGRAMS

These 5 programs have approved almost \$50 million in funding for >2,000 EE/RE projects to date.

Location	Program Name	# Participants	Total Financing	Avg. Assessment Size	Funding Mechanism
Babylon, NY	Long Island Green Homes	366	\$3,190,000	\$8,700	Town Waste Reserve Fund
Berkeley, CA	Berkeley FIRST	13	\$379,000	\$29,000	Micro-Bonding
Boulder County, CO	Climate Smart Loan Program	612	\$9,750,000	\$16,000	Bonding
Palm Desert, CA	Energy Independence Program	~200	\$8,500,000	~\$30,000	County Treasury & Dev. Agency
Sonoma County, CA	Energy Independence Program	~700	~\$25,000,000	~\$30,000	County Treasury

*Zimring 6/3/10 Presentation*

# EXAMPLES: WHO RUNS THE PROGRAM?

- **Berkeley and San Francisco**
  - Both administrative and funding functions run by a third party (Renewable Funding)
- **Boulder County**
  - Many functions run by county staff; processing applications and some parts of the funding run by third parties
- **Town of Babylon, Palm Desert and Sonoma County**
  - Most program functions run in-house.



# EXAMPLES: UNDERWRITING CRITERIA?

- Existing programs to date
  - Clear title, no involuntary liens, good property tax payment history for 2-3 years; often max assessment to property value ratio (~10%)
- San Francisco & other emerging programs
  - Will look at property value and outstanding mortgage to make sure the property is not currently under water



# EXAMPLES: SOURCE OF FUNDS?

- **Berkeley and San Francisco**
  - “Mini-bonds” purchased immediately by a pre-determined investor (~7.5% interest)
- **Boulder County**
  - Aggregates demand THEN issues a bond (5.2% - 6.8%)
- **Town of Babylon**
  - Existing solid waste fund repurposed for EE/RE loans (3%)
- **Palm Desert & Sonoma County**
  - Bonds are currently held by the local govt (7%)



# EXAMPLES: ELIGIBLE MEASURES?

- **Berkeley**
  - Pilot was solar-only
- **Boulder County**
  - Long list of measures including efficiency, solar, other renewables.
- **Town of Babylon**
  - Energy efficiency primarily with high bar to get solar.
- **Sonoma**
  - Range of efficiency, renewable energy, and water conservation measures
- **San Francisco**
  - Energy and water efficiency, plus renewables if EE is also done.





# EXAMPLES: Quality Control?

- **Berkeley**
  - State reviews the solar projects and provides a rebate reservation letter. Berkeley's administrator checks the documentation.
- **Palm Desert**
  - Program staff reviews the project scope to check for eligibility and reasonable cost. Site inspection of projects to ensure quality and compliance.
- **Boulder County**
  - Program staff reviews the project scope to check for eligibility. Spot checks of some projects to ensure quality, though many projects already require a building permit and inspection.
- **Town of Babylon**
  - Program staff reviews the project scope to check for eligibility compliance and reasonable cost. Performance testing is required. Must be a Building Performance Institute (BPI) accredited contractor.



*Zimring 6/3/10 Presentation*

# PACE BENEFITS FROM REGIONALIZATION

- **Reduces Administrative Costs**
  - Reduces administrative burden for local governments and eliminates redundancy
- **More Attractive Financing**
  - Large, diversified assessment pools are likely to deliver low interest-rate financing
- **Flexibility of Local Government Involvement**
  - Local governments may choose to operate strictly as assessment pass through agents or be involved more robustly in program operations

# POTENTIAL PACE ISSUES

- **Limits on What Can Be Funded**
  - Must be fixed to property and last at least as long at the financing term; potential limitations if required to be “cash flow positive”.
- **Cost of Setup**
  - Often administratively difficult to set up, especially for limited local government staff; however it is easier/cheaper as trail blazers develop templates.
- **Scale**
  - A city, town, or small county is probably too small to bring down costs; fix costs need to be spread over hundreds or thousands of assessments each year.
- **Access to Cheap \$**
  - Need volume and standardization to bring down cost of capital; “on demand” funding important but more expensive.
- **Lender Opposition**
  - Resistance by some lenders whose priority in bankruptcy may be reduced

# PACE BEST PRACTICES

## Two Core Elements

- Savings-to-Investment Ratio Greater than 1; expected energy savings should exceed investment costs
- Property Equity Evaluation –There should be sufficient equity in a property to justify debt placement

## DOE Resources Available Here:

[http://www1.eere.energy.gov/wip/pdfs/arra\\_guidelines\\_for\\_pilot\\_pace\\_programs.pdf](http://www1.eere.energy.gov/wip/pdfs/arra_guidelines_for_pilot_pace_programs.pdf)

**\*\*Watch For Updated Guidance in Coming Weeks\*\***

*Zimring 6/3/10 Presentation*

# ADDITIONAL DOE RESOURCES

To request specific Technical Assistance go to the TAC website at:

<https://tac.eecleanenergy.org/Default.aspx>

DOE Resource website on financing, including PACE programs:

<http://www.eecbg.energy.gov/solutioncenter/financialproducts/>

How to Guide for PACE Programs

<http://rael.berkeley.edu/files/berkeleysolar/HowTo.pdf>

Webinars, including 3 on aspects of PACE programs:

<http://www.eecbg.energy.gov/solutioncenter/webcasts/>

Federal Government's Policy Framework for PACE Financing Programs

[http://www.whitehouse.gov/assets/documents/PACE\\_Principles.pdf](http://www.whitehouse.gov/assets/documents/PACE_Principles.pdf)

DOE's Guidelines for Pilot PACE Financing Programs

[http://www1.eere.energy.gov/wip/pdfs/arra\\_guidelines\\_for\\_pilot\\_pace\\_programs.pdf](http://www1.eere.energy.gov/wip/pdfs/arra_guidelines_for_pilot_pace_programs.pdf)

# **PACE FINANCING CONSIDERATIONS**

**Presented by Stefanie Galey**

**6/3/2010**

# POTENTIAL CHALLENGES

- **Costs of the Program**
  - Taxable rates
  - Non-origination risk (blind pool vs. pre-identify)
  - Negative arbitrage
  - Costs of issuance
  - Delinquencies



# POTENTIAL SOLUTIONS

- **Larger pools with greater loan diversity**
- **Contributions/grants to fund costs, create reserves, etc. (may require legislation)**
- **Funding on draw down basis**
- **Credit enhancement to lower interest costs**

## **NEXT STEPS FOR:**

- INDIVIDUAL COUNTIES**
- AMC**
- ALL PACE STAKEHOLDERS**

# **NEXT STEPS: INDIVIDUAL COUNTIES**

- **Begin conversations with your Board so as to understand the fundamentals of PACE financing. The program will take time to setup for implementation, so now is the time to learn about and discuss the general concept.**
- **Consider regionalized PACE programs that encompass multiple local government jurisdictions (i.e. RMEB; North-West Central MN Draft Proposal)**
- **Ask questions and share your program ideas with AMC so that information can be shared statewide.**

# **NEXT STEPS: AMC**

- **A multi-stakeholder PACE coalition recently began meeting to work through the various PACE issues in need of resolution. AMC (along with OES) will be an integral part of those developments.**
- **PACE financing has been tentatively scheduled as a workshop topic for AMC's annual conference in December. It is hoped that the efforts of the PACE coalition will have developed the framework of a model program to present to counties at that time.**

# **NEXT STEPS: ALL PACE STAKEHOLDERS**

- **Other entities will participate in the PACE coalition to provide expertise in the areas of national PACE programming, financing, program administration, marketing etc.**
- **Ultimately, successful PACE programs require broad-based coalitions of support so as to maximize their impact in communities. It is therefore important to identify potential partners in your region and then engage them in PACE conversations.**

# THANK YOU FOR LISTENING!

If you have additional questions about PACE and/or how it relates to counties, please contact:

Ryan O'Connor  
AMC Energy Policy Analyst  
651-789-4339; [connor@mncounties.org](mailto:connor@mncounties.org)

Janet Streff  
MN Office of Energy Security Director  
651-297-2545; [Janet.Streff@state.mn.us](mailto:Janet.Streff@state.mn.us)

